

REMARKS

Further and favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

Claim 5 has been amended to limit the heat resistant fiber to polyparaphenylene terephthalamide fiber (Kevlar), and to limit the catalyst to an organic metal compound selected from the group consisting of a metal acid ester of titanium, a metal acid ester of zirconium, and an organic tin compound. Support for these amendments is found on page 21, lines 1-2, page 22, lines 6-8 and page 6, lines 3-5 of Applicants' specification. Claim 5 has been further amended to recite that the solution does not comprise a cross linking agent. Applicants' specification does not disclose the use of a cross linking agent. The courts have indicated that a specification having described the whole invention, necessarily described the part remaining after excising the invention of another. See In re Johnson, 194 USPQ 187 (CCPA 1977). Therefore, no new matter has been added to the application.

Claims 5 and 6 have been amended to make minor editorial changes, in order to place the claims in more conventional U.S. format.

Claims 1-4 and 7-12 have been cancelled.

New claims 13-15 have been added to the application. Support for the new claims is found on page 6, lines 15-16 and page 22, lines 8-12. Therefore, no new matter has been added to the application.

The rejection of claim 9 as being indefinite under 35 U.S.C. § 112, second paragraph has been obviated by the cancellation of the claim.

The patentability of the present invention over the disclosures of the references relied upon by the Examiner in rejecting the claims will be apparent upon consideration of the following remarks.

The provisional rejection of claims 1, 2, 5, 6, 8 and 9 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 5, 7, 8, 11, 13 and 14 of co-pending Application No. 09/874,055 has been obviated in view of the claim amendments. Specifically, the limitation of claim 4, which is not included in this rejection, has been incorporated into independent claim 5.

The rejection of claims 1, 2, 5, 6, 8 and 9 under 35 U.S.C. § 102(a) or (b), as

being anticipated by EP 1 179 633 or EP 1 059 383, respectively, has been obviated in view of the claim amendments. Specifically, the limitation of claim 4, which is not included in these rejections, has been incorporated into independent claim 5.

The rejection of claims 1-3, 5-9, 11 and 12 under 35 U.S.C. § 102(b) as being anticipated by Naito et al. has been obviated in view of the claim amendments. Specifically, the limitation of claim 4, which is not included in this rejection, has been incorporated into independent claim 5.

The rejection of claims 1-9, 11 and 12 under 35 U.S.C. § 102(b) as being anticipated by Stengle is respectfully traversed.

The Examiner takes the position that Stengle teaches heat resistant composite materials which meet the limitations of Applicants' claims. Specifically, the Examiner states that the base material of Stengle is a polyaramid fibrous yarn such as Kevlar, which is a polyparaphenylene terephthalamide fiber.

However, as discussed above, Applicants have amended the claims to limit the catalyst to an organic metal compound selected from the group consisting of a metal acid ester of titanium, a metal acid ester of zirconium, and an organic tin compound.

Stengle fails to teach or suggest an organic metal compound selected from the group consisting of a metal acid ester of titanium, a metal acid ester of zirconium, and an organic tin compound for curing the compound. On the contrary, Stengle discloses a catalyst such as phosphonic acids for curing organopolysiloxane. Therefore, the catalysts of Stengle are non-metal compounds, and are not chosen from the group recited in Applicants' amended claims.

For this reason, the invention of claims 5, 6 and new claims 13-15 is clearly patentable over Stengle. [Claims 1-4, 7-9, 11 and 12 have been cancelled.]

The rejection of claims 4 and 10 under 35 U.S.C. § 103(a) as being unpatentable over Naito et al. has been obviated due to the cancellation of these claims.

However, the limitation of cancelled claim 4 has been incorporated into independent claim 5. Therefore, the following remarks are made in view of amended claim 5.

Applicants have amended claim 5 to require polyparaphenylene terephthalamide fiber. The Examiner takes the position that it is well known to use aramid fibers in flame

resistant material, and therefore one having ordinary skill in the art would have been motivated by the teaching in Naito et al. of including organic fibers to select aramid fibers in an effort to improve the flame retardancy of the composition therein.

Applicants attach hereto a Rule 132 Declaration by Dr. Osamu Yagi, an inventor of the present application. The Declaration compares samples created using prior art fibers with samples created using polyparaphenylene terephthalamide fiber, as recited in Applicants' amended claim 5. Specifically, Samples A and A₀ use cellophane paper based on the teachings of EP '383, and Samples B and B₀ use yuzen paper sheet (Japanese paper on which a pattern is printed) based on the teachings of EP '633. Samples C and C₀ are based on the present invention, using polyparaphenylene terephthalamide. The results provided in Table 1 on page 3 of the Declaration indicate that the samples created using polyparaphenylene terephthalamide fiber are unexpectedly superior in cut resistance and cut resistance increase ratios to samples created using the other prior art fibers.

Applicants have also amended the claims to exclude a cross linking agent. On the contrary, as is evident from the teachings of Naito et al., a cross linking agent is an essential feature of the invention. (See abstract and claim 1 of Naito et al.) Naito et al. do not teach or suggest excluding the cross linking agent.

For these reasons, the invention of claims 5, 6 and new claims 13-15 is patentable over the teachings of Naito et al.

The rejection of claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Stengle in view of Jasinski et al. has been obviated due to the cancellation of claim 10.

However, claim 5 has been amended to recite that the catalyst is an organic metal compound selected from the group consisting of a metal acid ester of titanium, a metal acid ester of zirconium, and an organic tin compound. Therefore, the following remarks are made in view of amended claim 5.

The Examiner admits that Stengle fails to teach a metal catalyst. The Examiner asserts that Jasinski teaches metal catalysts that can be used to obtain equivalent results, such as aluminum chelates.

Example 8 of Jasinski discloses aluminum chelate and zirconium chelate. However, these chelates are quite different from the specific organic metal compounds


recited in Applicants' amended claim 5. Jasinki fails to teach or suggest the specific catalysts recited in Applicants' amended claims.

For these reasons, the invention of claims 5, 6 and new claims 13-15 are patentable over the teachings of Stengle in view of Jasinski.

Therefore, in view of the foregoing amendments and remarks, it is submitted that each of the grounds of rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

Respectfully submitted,

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